

WHAT IS CLAIMED IS:

1. An image processing apparatus comprising:
  - an image storage unit that stores a plurality types of image data in a first data format and that is compressed;
  - 5 a data format converter that converts the first data format of the image data to a second data format being a general data format; and
  - a communicator including
    - a communication interface that transmits the image data of the first data format and the image data of the second data format as
    - 10 reference image data for the image data of the first data format.
2. The image processing apparatus according to claim 1, wherein the data format converter comprises:
  - an expander that expands the image data stored in the image
  - 15 storage unit;
  - a multinary unit that converts image data expanded of low bits to multinary image data; and
  - a data compressor that compresses the multinary image data in a multinary general compression format.
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3. The image processing apparatus according to claim 1, wherein the data format converter comprises:
  - an expander that expands the image data stored in the image storage unit;
  - 25 a binary unit that converts the image data expanded, which is

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<b>Related Pending Application</b>
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monochrome multinary image data, to binary image data; and  
a data compressor that compresses the binary image data in a  
binary general compression format.

- 5 4. The image processing apparatus according to claim 1, wherein  
the data format converter comprises:

a color space converter that converts a color space of the image  
data stored in the image storage unit, which is color multinary image  
data, to a general color space.

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5. The image processing apparatus according to claim 1, wherein  
the data format converter comprises:

at least one resolution converter of a multinary resolution  
converter that performs resolution conversion on the image data stored  
15 in the image storage unit, which is multinary image data; and

a binary resolution converter that performs resolution conversion  
on the binary image data.

6. The image processing apparatus according to claim 5, wherein  
20 the resolution converter performs resolution conversion on image data  
at a conversion rate such that the resolution of the image data as a  
base of conversion and a resolution after the conversion are fallen into  
a predetermined range.

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7. The image processing apparatus according to claim 1, further comprising:

an imaging unit that forms an image on a recording medium based on the image data stored in the image storage unit, wherein a  
5 printing function is combined with the imaging unit to adapt the first data format of the image data stored in the image storage unit to a data format used in the imaging unit.